

PHNL030896

PCT/IB2004/051268

## CLAIMS:

1. An apparatus for mapping primitives of a 3D graphics model from a texture space to a screen space; the apparatus including a texture memory (134) for storing texture maps; and a resampler (132, 140) being operative to, for each primitive, resample data from a texture map that corresponds to the primitive to corresponding pixel data defining a portion 5 of a display image that corresponds to the primitive; the resampler being operative to select a resampling algorithm for performing the resampling from a respective set of at least two distinct resampling algorithms; the selection being in dependence on a size of the primitive.
2. An apparatus as claimed in claim 1, wherein the resampler is operative to 10 perform the selection by comparing the size of the primitive to a predetermined threshold.
3. An apparatus as claimed in claim 2, wherein the apparatus includes a buffer associated with the resampler for accumulating resampled data; the buffer having a predetermined buffer size; the threshold depending on the predetermined buffer size. 15
4. An apparatus as claimed in claim 1, wherein the size of the primitive depends on the number of texels or pixels within a boundary of the primitive.
5. An apparatus as claimed in claim 2, or 3, wherein a first one of the resampling 20 algorithms is a 1-pass 2-dimensional resampling algorithm and a second one of the resampling algorithms is a two-pass one-dimensional resampling algorithm; the first algorithm being selected for primitives with a size below the threshold and the second algorithm being selected for primitives with a size above the threshold.
- 25 6. A method of mapping primitives of a 3D graphics model from a texture space to a screen space; the method including:
  - resampling in a texture space, for each primitive, data from a texture map that corresponds to the primitive to texture data for texels associated with the primitive; and

PHNL030896

PCT/IB2004/051268

16

- resampling in a screen space, for each primitive, the texture data to corresponding pixel data defining a portion of a display image that corresponds to the primitive; and
- selecting for the texture space resampling and/or the screen space resampling a resampling algorithm from a respective set of at least two distinct resampling algorithms; the selection being in dependence on a size of the primitive.

5

7. A computer program operative to cause a processor to perform the method of claim 6.